BALTIC SCIENTIFIC INSTRUMENTS

P-type HPGe Coaxial Detectors GCD

(Liquid Nitrogen cooled)

Application

Detection of Gamma-rays in nuclear energetics and environmental control, in industry and scientific research, in medicine and other applications.

Complete set (standard)

- HPGe coaxial detector
- Preamplifier with cooled input stage
- Dewar vessel
- Cable set
- Documentation

Accessories (optional)

- Multichannel Analyzer (Digital or Analog-Digital)
- Analytical Software packages:
  - quantitative and qualitative analysis
  - γ-spectra modeling & efficiency registration calculation for complex geometry objects
  - extended radionuclide library
- Liquid nitrogen storage and filling system
- Liquid nitrogen sensor and monitor
- Cable set extension

Features

- 10% - 160% and higher efficiency HPGe coaxial detectors are available
- Energy range 40 keV - 10 MeV
- Input window materials: Aluminum, Beryllium or Carbon-fiber
- Built-in or Remote Preamplifier types are available depending on application
- Low instrument background
- High energy rate up to 200000 MeV/s
- Excellent peak symmetry & high resolution
- HV supply protection if detector is warm
- High count rate indicator
- Variable cryostat design modifications (ref. p. 58)

Baltic Scientific Instruments
Ganibu Dambis 26
Riga, LV - 1005
Latvia

Phone: (+371) 67383947
Fax: (+371) 67382620
Email: sales@bsi.lv
www.bsi.lv

Specification

Model	Relative Efficiency, %	Energy resolution 122 keV, (eV)	Energy resolution 1.33 MeV, (keV)	Peak/ Compton ratio	Peak Shape FW.1M FWHM	Peak Shape FW.02M FWHM
GCD - 10 175	10	825	1.75	41:1	1.9	2.65
GCD - 15 180	15	825	1.80	46:1	1.9	2.65
GCD - 20 180	20	850	1.80	51:1	1.9	2.65
GCD - 25 185	25	850	1.85	55:1	1.9	2.65
GCD - 30 185	30	875	1.85	58:1	1.9	2.65
GCD - 35 190	35	875	1.90	60:1	1.9	2.65
GCD - 40 190	40	895	1.90	62:1	1.9	2.65
GCD - 50 190	50	895	1.90	64:1	1.9	2.65
GCD - 60 200	60	1000	2.00	68:1	2.0	3.00
GCD - 70 200	70	1000	2.00	73:1	2.0	3.00
GCD - 80 210	80	1000	2.10	77:1	2.0	3.00
GCD - 100 220	100	1000	2.10	81:1	2.0	3.00
GCD - 120 220	120	1000	2.10	83:1	2.0	3.00
GCD - 140 220	140	1100	2.20	86:1	2.0	3.00
GCD - 160 220	160*	1150	2.20	88:1	2.0	3.00

* Detectors with higher efficiency are available

Plenty of cryostat geometries available